

A B S T R A C T

A BUOYANCY DEVICE AND A METHOD FOR STABILIZING AND
CONTROLLING THE LOWERING OR RAISING OF A STRUCTURE
5 BETWEEN THE SURFACE AND THE BED OF THE SEA

The present invention relates to the use of a
buoyancy fluid presenting density that is less than that
of sea water, and that is confined in a rigid or flexible
10 leaktight casing (4₁, 19₁), so as to constitute an
immersed buoyancy element (4, 19), said use being
characterized in that said buoyancy fluid is a compound
that is naturally in the gaseous state at ambient
atmospheric temperature and pressure, and in the liquid
15 state at the underwater depth to which said buoyancy
element is immersed. The present invention also relates
to a method of putting a buoyancy element into place
between the surface and the bed of the sea, said method
being characterized in that said fluid is stored in a
20 tank on a surface ship (61) as a liquid in the cooled or
compressed liquid state, and it is injected in the liquid
state into a pipe (23) from the surface (61) where it is
stored to a said immersed casing (4₁, 19₁) at an
underwater depth at which the underwater pressure is not
25 greater than the vapor pressure of the gas corresponding
to said compound at the temperature at said depth.

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Translation of the title and the abstract as they were when originally filed by the
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